

## **AMENDMENTS**

### **In the claims:**

Please amend the claims as indicated hereafter.

1-54. (Canceled)

55. (New) A communication system, comprising:

a plurality of network elements, each of the network elements coupled to a respective subscriber line extending from a field office of a communication network and configured to control communication occurring across said respective subscriber line;

a plurality of clients remotely located from the network elements, the plurality of clients including a first client and a second client; and

an element management system (EMS) remotely located from the network elements and the clients, comprising:

memory for storing sets of graphical user interface (GUI) code, client profile data, and element status data, each set of GUI code associated with a respective network element type, the client profile data indicating which of the network elements are of interest to the clients, the element status data indicating a respective status for each of the plurality of the network elements indicated by the client profile data to be of interest to at least one of the clients; and

a system controller configured to receive a first notification from the first client, the first notification identifying one of the network elements, the system controller configured to determine a network type for the identified network element and to retrieve the set of GUI code associated with the determined network element type in response to the first notification, the system controller configured to transmit the retrieved set of GUI code to

the first client in response to the first notification, wherein the retrieved set of GUI code, when run on the first client, causes the first client to display a GUI for displaying information pertaining to the identified network element, the system controller configured to update the client profile data, in response to the first notification, such that the client profile indicates that the first client is interested in the identified network element, the system controller configured to automatically poll, based on the client profile data, each of the network elements indicated to be of interest to at least one of the clients by the client profile data, wherein the system controller, in automatically polling the network elements, is configured to poll the identified network element in response to a determination that the client profile data indicates the identified network element to be of interest to at least one of the clients, the system controller further configured to detect a status change for the identified network element by comparing the element status data to data received from the identified network element via polling, the system controller configured to transmit element update data indicative of the detected status change to the first client in response to a determination by the system controller that the client profile data indicates the identified network element to be of interest to the first client, the system controller further configured to update the element status data in response to the detection of the status change by the system controller.

56. (New) The system of claim 55, wherein the system controller is configured to refrain from polling at least one of the network elements until the client profile data is updated to indicate that at least one of the clients is interested in the at least one network element.

57. (New) The system of claim 55, wherein the first client is configured to transmit a second notification to the EMS in response to a determination that a user has closed the GUI, and wherein the system controller is configured to update the client profile data, in response to the second notification, such that the client profile data no longer indicates the identified network element to be of interest to the first client.

58. (New) The system of claim 55, wherein the system controller is configured to transmit a message to the first client in response to a determination by the system controller that the client profile data indicates the first client to be interested in the identified network element, wherein the system controller is configured to update the client profile data, if the system controller fails to receive a reply to the message within a predefined time period after transmitting the message, such that the client profile data no longer indicates the identified network element to be of interest to the first client.

59. (New) The system of claim 55, wherein the system controller comprises a status manager and a communication manager, the status manager configured to automatically poll, based on the client profile data, each of the network elements indicated to be of interest to at least one of the clients by the client profile data, the communication manager configured to communicate with the clients, to receive the first notification from the first client, and to transmit the element update data to the first client, wherein the status manager and the communication manager are separately and concurrently executed by at least one processing element.

60. (New) The system of claim 59, wherein the status manager is configured to communicate with the network elements via transmission control protocol/internet protocol (TCP/IP) and simple network management protocol (SNMP), and wherein the communication manager comprises a JAVA messaging system (JMS).

61. (New) The system of claim 55, wherein the system controller is configured to consult the client profile data in response to the detection of the status change for determining which of the clients is interested in the identified network element, the system controller further configured to transmit the element update data to the second client in response to the detection of the status change and a determination, based on the client profile data, that the second client is interested in the identified network element.

62. (New) The system of claim 55, wherein the system controller, in response to the first notification, is configured to retrieve a portion of the element status data associated with the identified network element and to transmit the retrieved portion to the first client without polling the identified network element in response to the first notification, the portion indicative of data received from the identified network element via polling prior to the system controller receiving the first notification, wherein the client profile data indicates that the second client is interested in the identified network element.

63. (New) A method for use in a communication system having a plurality of network elements, each of the network elements coupled to a respective subscriber line extending from a field office of a communication network, comprising the steps of:

storing sets of graphical user interface (GUI) code remotely from the network elements and a plurality of clients, the plurality of clients including a first client and a second client;

storing client profile data remotely from the network elements and the clients, the client profile data indicating which of the network elements are of interest to the clients;

storing element status data remotely from the network elements and the clients, the element status data indicating a respective status for each of the plurality of network elements indicated by the client profile data to be of interest to at least one of the clients;

receiving a first notification from the first client, the first notification identifying one of the network elements;

determining a network type for the identified network element;

retrieving, based on the determining step, the set of GUI code associated with the determined network type;

transmitting the retrieved set of GUI code to the first client, wherein the retrieved set of GUI code, when run on the first client, causes the first client to display a GUI for displaying information pertaining to the first client;

updating, in response to the first notification, the client profile data such that the client profile data indicates that the first client is interested in the identified network element;

automatically polling, based on the client profile data, each of the network elements indicated to be of interest to at least one of the clients by the client profile data, wherein the automatically polling step comprises the step of polling the identified network element in response to a determination that the client profile data indicates the identified network element to be of interest to at least one of the clients;

comparing the element status data to data received from the identified network via the polling the identified network element step;

detecting a status change for the identified network element based on the comparing step;

transmitting, to the first client, element update data indicative of the status change in response to the detecting step and in response to a determination that the client profile data indicates the identified network element to be of interest to the first client; and

updating the element status data in response to the detecting step.

64. (New) The method of claim 63, further comprising the steps of:

determining that a user of the first client has closed the GUI;

transmitting a second notification from the first client in response to the determining that the user of the first client has closed the GUI step; and

updating the client profile data, in response to the second notification, such that the client profile data no longer indicates the identified network element to be of interest to the first client.

65. (New) The method of claim 63, further comprising the steps of:

transmitting a message to the first client in response to a determination that the client profile data indicates the first client to be interested in the identified network element;

determining whether a reply to the message is received within a predefined time period after the transmitting the message step; and

updating the client profile data, if the reply is not received within the predefined time period, such that the client profile data no longer indicates the identified network element to be of interest to the first client.

66. (New) The method of claim 63, further comprising the steps of:  
consulting the client profile data in response to the detecting step;  
determining which of the clients is interested in the identified network element based on  
the consulting step; and  
transmitting the element update data to the second client in response to the detecting step  
if the client profile data indicates that the second client is interested in the identified network  
element.

67. (New) The method of claim 63, further comprising the steps of:  
retrieving, in response to the first notification, a portion of the element status data  
associated with the identified network element; and  
transmitting the retrieved portion to the first client without polling the identified network  
element in response to the first notification, wherein the portion is indicative of data received from  
the identified network element via polling prior to the receiving the first notification step, wherein  
the client profile data indicates that the second client is interested in the identified network  
element.